

## HITSP Traceability Matrix

### EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
Medication Management			
CAP117 - Communicate Ambulatory and Long Term Care Prescription Specification	SC114 Administrative Transport to Health Plan	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
		SC109 - Security Audit Collaboration	Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
		T17 - Secured Communication Channel	Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T85 - Administrative Transport to Health Plan	Council for Affordable Quality Healthcare (CAQH) CORE 270 Connectivity Rule	
		Council for Affordable Quality Healthcare (CAQH) CORE 153 Connectivity Rule	
	T40 - Patient Health Plan Eligibility Verification	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1
			Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92
			Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010
			Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010
			Council for Affordable Quality Health Care (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase I Operating Rules
			Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #258 Normalizing Last Name Rule v2.0.0
			Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #259 AAA Error Code Reporting Rule v2.0.0
			Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #260 Eligibility Data Content Rule v2.0.0
	T42 - Medication Dispensing Status	TP43 - Medication Orders	Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI)
			Drug Enforcement Administration (DEA) Prescriber Number
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			Health Care Provider Taxonomy
	TP43 - Medication Orders	None	National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 8.1 or 10.1
			Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI)
			Drug Enforcement Administration (DEA) Prescriber Number
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			Federal Medication Terminologies
			Health Care Provider Taxonomy
			Health Level Seven (HL7) Version 2.5/2.5.1 – Pharmacy/Treatment Orders (OMP)
	National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 10.1		

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	TP46 - Medication Formulary and Benefits Information	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1 Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 National Council for Prescription Drug Programs (NCPDP) Formulary and Benefits Standard Implementation Guide National Council for Prescription Drug Programs (NCPDP) Telecommunication Standard Implementation Guide Version 5.1
	TP43 - Medication Orders	None	Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI) Drug Enforcement Administration (DEA) Prescriber Number Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987 Federal Medication Terminologies Health Care Provider Taxonomy Health Level Seven (HL7) Version 2.5/2.5.1 – Pharmacy/Treatment Orders (OMP) National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 10.1
	T42 - Medication Dispensing Status	TP43 - Medication Orders	Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI) Drug Enforcement Administration (DEA) Prescriber Number Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987 Health Care Provider Taxonomy National Council for Prescription Drug Programs (NCPDP) SCRIPT Standard Implementation Guide Version 8.1 or 10.1
	T40 - Patient Health Plan Eligibility Verification	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 Council for Affordable Quality Health Care (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase I Operating Rules Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #258 Normalizing Last Name Rule v2.0.0 Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #259 AAA Error Code Reporting Rule v2.0.0 Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #260 Eligibility Data Content Rule v2.0.0
	TP46 - Medication Formulary and Benefits Information	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1 Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 National Council for Prescription Drug Programs (NCPDP) Formulary and Benefits Standard Implementation Guide National Council for Prescription Drug Programs (NCPDP) Telecommunication Standard Implementation Guide Version 5.1

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CAP118 - Communicate Hospital Prescription Specification	SC114 - Administrative Transport to Health Plan	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
	SC109 - Security Audit Collaboration		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
	T17 - Secured Communication Channel		Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T85 - Administrative Transport to Health Plan		Council for Affordable Quality Healthcare (CAQH) CORE 270 Connectivity Rule
			Council for Affordable Quality Healthcare (CAQH) CORE 153 Connectivity Rule
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
	T17 - Secured Communication Channel		Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication

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<b>Exchange of Clinical Data</b>			
	C28 - Emergency Care Summary Document using IHE Emergency Department Encounter Summary (EDES)	None	Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) - Emergency Department Encounter Summary (EDES), Technical Framework Supplement, Volume I, Revision 3.0, 2007-2008
	C32 - Summary Documents using HL7 Continuity of Care Documents (CCD)	C83 - CDA Content Modules C80 - Clinical Document and Message Terminology	Health Level Seven (HL7) Implementation Guide: CDA Release 2 – Continuity of Care Document (CCD), April 01, 2007 Integrating the Healthcare Enterprise (IHE) Exchange of Personal Health Record Content (XPHR)
	C39 - Encounter Message	None	Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication #5-2, May, 1987 Health Level Seven (HL7) Version 2.5 International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) International Classification of Diseases, 10th Revision, Related Health Problems (ICD-10-CM) International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM) International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) Logical Observation Identifiers Names and Codes (LOINC®) National Uniform Billing Committee (NUBC) Uniform Bill Version 1992 (UB-92) Current UB Data Specification Manual Field 22, Patient Discharge Status, Codes Unified Code for Units of Measure (UCUM)
	C48 - Encounter Document Using IHE Medical Summary (XDS-MS)	C83 CDA Content Modules	Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2 Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC), Revision 4.0, 2008 - 2009, Cross-Enterprise Sharing of Medical Summaries (XDS-MS) Integration Profile
	C74 - Remote Monitoring Observation Document	C83 CDA Content Modules C80 Clinical Document and Message Terminology	Health Level Seven (HL7) Implementation Guide for CDA Release 2.0 Personal Health Monitoring Report (PHMR) DSTU Release 1 ISO/IEEE 11073-10101 Health informatics - Point-of-care Medical Device Communication – Nomenclature
	C75 - Healthcare Associated Infection (HAI) Report	None	Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2 Health Level Seven (HL7) Implementation Guide for CDA Release 2: NHSN Healthcare Associated Infection (HAI) Reports, Release1
	C78 - Immunization Document	C83 - CDA Content Modules	Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2 Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0

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CAP119 - Communicate Structured Document Specification	C80 - Clinical Document and Message Terminology	C38 - CDA Content Modules	American Medical Association (AMA) Current Procedural Terminology (CPT®) Fourth Edition (CPT-4)
			Accredited Standards Committee (ASC) X12 Standards Release 004010
			CDC Race and Ethnicity Code Sets
			CDC Codes for Vaccine Administered (CVX code)
			CDC Manufacturers of Vaccines (MVX)
			CDC Implementation Guide for Immunizations Data Transaction using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol. Implementation Guide Version 2.2 June 2006
			FIPS 5-2, Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			FDA National Drug Code (NDC)
			FDA Unique Ingredient Identifier (UNII)
			HL7 Messaging Standard Version 2.5.1
			Health Level Seven (HL7) Version 3.0 Vocabulary
			Human Genome Organization (HUGO) Gene Nomenclature Committee at the European Bioinformatics Institute Gene Names
			Human Genome Variation Society (HGVS) Description of Sequence Variants – February, 20, 2008
			World Health Organization International Classification of Functioning, Disability and Health (ICF)
			International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)
			ISO 3166-1 Codes for the representation of names of countries and their subdivisions: Part 1 Countries
			Internet Engineering Task Force (IETF) Tags for Identifying Languages, "Request for Comment" (RFC) # 4646, September, 2006
			Logical Observation Identifiers Names and Codes (LOINC®)
			National Center for Biotechnology Information (NCBI) Genetic Reference Sequences
			National Cancer Institute (NCI) Thesaurus
			National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm
			National Uniform Billing Committee (NUBC) Uniform Bill (UB-04) Current UB Data Specification Manual
			National Uniform Billing Committee (NUBC) Healthcare Provider Taxonomy
			Unified Code for Units of Measure (UCUM)
			USPS Postal Codes
			VHA National Drug File Reference Terminology (NDF-RT) Formulary
	C83 - CDA Content Modules	C80 - Clinical Document and Message Terminology	Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2
			Health Level Seven (HL7) Implementation Guide: CDA Release 2 – Continuity of Care Document (CCD), April 01, 2007
			Health Level Seven (HL7) Implementation Guide for CDA Release 2: History and Physical (H&P) Notes
			Health Level Seven (HL7) Implementation Guide for CDA Release 2: Consultation Note
	C84 - Consult and History & Physical Note	C83 - CDA Content Modules	Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC), Revision 4.0
			Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2
			Health Level Seven (HL7) Implementation Guide for CDA Release 2.0: Consultation Note
		TP13 - Manage Sharing of Documents	Health Level Seven (HL7) Implementation Guide for CDA Release 2.0: History and Physical (H&P) Notes
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement

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HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
	SC112 - Healthcare Document Management		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b) OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3 OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0 International Organization for Standardization (ISO) Health informatics - 9660 Level 1 USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile
	C62 - Unstructured Document	C80 - Clinical Document and Message Terminology	International Organization for Standardization (ISO) PDF/A ISO 19005-1b. Document management - Electronic document file format for long-term preservation - Part 1: Use of PDF (PDF/A)
		C83 - CDA Content Modules	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross Enterprise Sharing of Scanned Documents (XDS-SD) Integration Profile

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CAP120 - Communicate Unstructured Document Specification	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			International Organization for Standardization (ISO) Health informatics - 9660 Level 1
		T29 - Notification of Document Availability	USB Removable Device Type 2.0 (USB Implementers Forum)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]



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CAP121 - Communicate Clinical Referral Request Specification	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
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			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
		SC109 - Security Audit	Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
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			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile



**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
	SC109 - Security Audit	SC109 - Security Audit	Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
CAP122 - Retrieve Medical Knowledge Specification	T67 - Clinical Referral Request Transport	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008-2009 Document-based Referral Request (DRR)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	SC111 - Knowledge and Vocabulary	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise User Assertion (XUA)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	C19 - Entity Identify Assertion	TP13 Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
	SC113 - Query for Existing Data	SC109 - Security Audit	Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2
	SC113 - Query for Existing Data	SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	SC113 - Query for Existing Data	SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP123 - Retrieve Existing Data Specification	SC109 - Query for Existing Data	SC109 - Security Audit	Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		TP21 - Query for Existing Data	Health Level Seven (HL7) Version 3.0 Infrastructure Management - Query Infrastructure, Release 2 DSTU Ballot 1 - September 2008 Health Level Seven (HL7) Version 3.0 Standard: Transport Specification - Web Services Profile, Release 2 Committee Ballot 1 - May 2008 Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008 2009, Draft for Trial Implementation, August 22, 2008 Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2
	TP21 - Query for Existing Data	T15 Collect and Communicate Security Audit Trail	Health Level Seven (HL7) Version 3.0 Infrastructure Management - Query Infrastructure, Release 2 DSTU Ballot 1 - September 2008
		T16 Consistent Time	Health Level Seven (HL7) Version 3.0 Standard: Transport Specification - Web Services Profile, Release 2 Committee Ballot 1 - May 2008
		T17 Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008 – 2009, Draft for Trial Implementation, August 22, 2008 (QED)
		TP30 Manage Consent Directives	Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2
CAP124 - Establish Secure Web Access Specification	C44 - Secure Web Connection	None	Internet Engineering Task Force (IETF) Hypertext Transfer Protocol (HTTP) over Transport Layer Security (TLS) (RFC) #2818, May 2000
	SC108 - Access Control	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		TP20 - Access Control	Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		TP30 - Manage Consent Directives	Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2
	SC109 - Security Audit	T15 Collect and Communicate Security Audit Trail	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T16 Consistent Time	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	T17 - Secured Communication Channel	T15 - Collect and Communicate Security Audit Trail	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T18 - View Laboratory Results from a Web Application	C44 - Secure Web Connection C37 - Lab Report Document	Internet Engineering Task Force (IETF) Hypertext Transfer Protocol (HTTP) over Transport Layer Security (TLS) (RFC) #2818, May 2000

**HITSP Traceability Matrix**  
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HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP125 - Retrieve Genomic Decision Support Specification	C90 - Clinical Genomic Decision Support	C80 - Clinical Document and Message Terminology C83 - CDA Content Modules	Health Level Seven (HL7) Version 3.0 Clinical Genomics; Pedigree, Release 1
	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3 OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T29 - Notification of Document Availability	International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
	SC109 - Security Audit Collaboration		Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
	SC110 - Patient Identification Management		Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	T17 - Secured Communication Channel		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T64 - Identify Communications Recipients		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
<b>Exchange of Laboratory and Imaging Data</b>			
CAP126 - Communication Lab Results Message Specification	C35 - Lab Result Terminology	None	Health Level Seven (HL7) Version 2.5.1 International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) Logical Observation Identifiers Names and Codes (LOINC®) Unified Code for Units of Measure (UCUM)
	C36 - Lab Result Message	C35 - Lab Result Terminology	Health Level Seven (HL7) U.S. Realm - Interoperability Specification: Lab Result Message to EHR (ORU^R01) (HL7 Version 2.5.1) September, 2007 Health Level Seven (HL7) Version 2.5.1 International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)
	C87 - Anonymize Public Health Case Reporting Data	C80 - Clinical Document and Message Terminology C83 - CDA Content Modules	Health Level Seven (HL7) Version 3.0 Clinical Genomics; Pedigree, Release 1
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005 Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T14 - Send Laboratory Result Message	C36 - Lab Result Message	Health Level Seven (HL7) Version 2.5.1
	T24 - Pseudonymize	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymization, Unpublished Technical Specification # 25237 Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0
	C25 - Anonymize	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymisation, Unpublished Technical Specification number 25237
	C35 - Lab Result Terminology	None	Health Level Seven (HL7) Version 2.5.1 International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) Logical Observation Identifiers Names and Codes (LOINC®) Unified Code for Units of Measure (UCUM)
	C37 - Lab Report Document	C35 - Lab Result Terminology	Health Level Seven (HL7) Clinical Document Architecture Release 2 (CDA R2) Integrating the Healthcare Enterprise (IHE) Laboratory Technical Framework Volume 3 (LAB TF-3) Document-based Transactions, Revision 2.0 - For Trial Implementation, August 16, 2007
	C87 - Anonymize Public Health Case Reporting Data	C80 - Clinical Document and Message Terminology C83 - CDA Content Modules	Health Level Seven (HL7) Version 3.0 Clinical Genomics; Pedigree, Release 1
SC111 - Knowledge and		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) Common Terminology Services (CTS) Release 1

**HITSP Traceability Matrix**  
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HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP127 - Communicate Lab Results Document Specification	Vocabulary	T66 - Retrieve Value Set	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008-2009 Sharing Value Sets (SVS) Integration Profile
		T81 - Retrieval of Medical Knowledge	Health Level Seven (HL7) Version 3.0 Context-Aware Information Retrieval Specification: URL Implementation Guide
	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005

# **HITSP Traceability Matrix** **EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile

## **Quality Management**

CAP128 - Communicate Imaging Information Specification	SC111 - Knowledge and Vocabulary	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T66 - Retrieve Value Set	Health Level Seven (HL7) Common Terminology Services (CTS) Release 1
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008-2009 Sharing Value Sets (SVS) Integration Profile
		T81 - Retrieval of Medical Knowledge	Health Level Seven (HL7) Version 3.0 Context-Aware Information Retrieval Specification: URL Implementation Guide
	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	TP89 - Sharing Imaging Results	SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile
	TP89 - Sharing Imaging Results	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) Radiology Technical Framework Revision 8.0
		TP22 - Patient ID Cross Referencing	
	SC111 - Knowledge and Vocabulary	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T66 - Retrieve Value Set	Health Level Seven (HL7) Common Terminology Services (CTS) Release 1
		T81 - Retrieval of Medical Knowledge	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008-2009 Sharing Value Sets (SVS) Integration Profile
	C105 - Patient Level Quality Data Document Using HL7 Quality Reporting Document Architecture (QRDA)	C83 CDA Content Modules C80 Clinical Document and Message Terminology	Health Level Seven (HL7) Version 3.0 Context-Aware Information Retrieval Specification: URL Implementation Guide
			American Medical Association (AMA) Current Procedural Terminology (CPT®) Fourth Edition (CPT-4); CPT Evaluation and Management Codes
			Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI)
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			Federal Medication Terminologies
			Health Level Seven (HL7) Version 2.5
			Health Level Seven (HL7) Version 3.0
			Implementation Guide for CDA Release 2
			Quality Reporting Document Architecture (QRDA)
			Based on HL7 CDA Release 2.0
			CDAR2_QRDA_R1D1_2009MAR
			International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS)
			International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM)
			International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)
			Logical Observation Identifiers Names and Codes (LOINC®)
			National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm
			National Uniform Billing Committee (NUBC) Uniform Bill Version 2007 (UB-04) Current UB Data Specification Manual Field 22, Patient Discharge Status, Codes
			Unified Code for Units of Measure (UCUM)



**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP129 - Communicate Quality Measure Data Specification	C25 - Anonymize	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymisation, Unpublished Technical Specification number 25237
	C34 - Patient Level Quality Data Message	None	American Medical Association (AMA) Current Procedural Terminology (CPT®) Fourth Edition (CPT-4); CPT Evaluation and Management Codes
			Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI)
			Digital Imaging and Communications in Medicine (DICOM) - Part16: Content Mapping Resource
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			Federal Medication Terminologies
			Health Level Seven (HL7) Version 2.5
			Health Level Seven (HL7) Version 3.0
			International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS)
			International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM)
			International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)
			Logical Observation Identifiers Names and Codes (LOINC®)
			National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm
			National Uniform Billing Committee (NUBC) Uniform Bill Version 2007 (UB-04) Current UB Data Specification Manual Field 22, Patient Discharge Status, Codes
			Unified Code for Units of Measure (UCUM) Expressions
	SC112 - Healthcare Document Management	TP13 - Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3 OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T29 - Notification of Document Availability	International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile	
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	C26 - Nonrepudiation of Origin	TP13 Manage Sharing of Documents	American Society for Testing and Materials (ASTM) Standard Guide for Electronic Authentication of Health Care Information: # E1762-95(2003)
		T31 Document Reliable Interchange	European Telecommunications Standards Institute (ETSI) Technical Specification TS 101 903: XML Advanced Electronic Signatures (XadES)
		T33 Transfer of Documents on Media	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement Volume 3 – Document Digital Signature (DSG) Content Profile
	C26 - Nonrepudiation of Origin	TP13 Manage Sharing of Documents	American Society for Testing and Materials (ASTM) Standard Guide for Electronic Authentication of Health Care Information: # E1762-95(2003)
		T31 Document Reliable Interchange	European Telecommunications Standards Institute (ETSI) Technical Specification TS 101 903: XML Advanced Electronic Signatures (XadES)
		T33 Transfer of Documents on Media	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement Volume 3 – Document Digital Signature (DSG) Content Profile
	C106 - Measurement Criteria Document	C80-Clinical Document and Message Terminology	Health Level Seven (HL7) eMeasure: Representation of quality measures in the Health Quality Measures Format (HQMF), Release 1 (Draft Standard for Trial Use)
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP130 - Communicate Quality Measure Specification	SC108 - Access Control	TP20 - Access Control	Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		TP30 - Manage Consent Directives	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	SC109 - Security Audit	T15 Collect and Communicate Security Audit Trail	Health Level Seven (HL7) Version 3.0 Infrastructure Management - Query Infrastructure, Release 2 DSTU Ballot 1 - September 2008
		T16 Consistent Time	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	SC111 - Knowledge and Vocabulary	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T66 - Retrieve Value Set	Health Level Seven (HL7) Common Terminology Services (CTS) Release 1
		T81 - Retrieval of Medical Knowledge	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008-2009 Sharing Value Sets (SVS) Integration Profile
	T17 - Secured Communication Channel	None	Health Level Seven (HL7) Version 3.0 Context-Aware Information Retrieval Specification: URL Implementation Guide
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication

Immunization			
CAP131 - Update Immunization Registry Specification	C72 - Immunization Message	C80 Clinical Document and Message Terminology	Centers for Disease Control and Prevention Implementation Guide for Immunization Data Transactions using Versions 2.3.1 of the Health Level Seven (HL7) Standard Protocol. Implementation Guide Version 2.2 June 2006
	SC110 - Patient Identification Management	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		TP22 Patient ID Cross-Referencing	Health Level Seven (HL7) Version 2.3.1 Chapter 2 Control, Chapter 3 Patient Administration
			Health Level Seven (HL7) Version 2.5, Chapter 2 Control, Chapter 3 Patient Administration, Chapter 5 - Query
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Patient Identifier Cross-Referencing Integration Profile (PIX)
		T23 Patient Demographics Query	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008 - 2009, Pediatric Demographics, Draft for Trial Implementation (August 22, 2008)
			Health Level Seven (HL7) Version 2.5, Chapter 2 Control, Chapter 3 Patient Administration, Chapter 5 - Query
		T24 Pseudonymize	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Patient Demographics Query (PDQ) Integration Profile
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008 - 2009, Pediatric Demographics, Draft for Trial Implementation (August 22, 2008)
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0
			International Organization for Standardization (ISO) Health Informatics -- Pseudonymization, Unpublished Technical Specification # 25237
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
	SC109 - Security Audit		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
		SC109 - Security Audit	Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T24 - Pseudonymize	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymization, Unpublished Technical Specification # 25237 Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0
			Health Level Seven (HL7) Version 2.3.1 Centers for Disease Control and Prevention Implementation Guide for Immunizations Data Transaction using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol. Implementation Guide Version 2.2 June 2006
CAP132 - Retrieve Immunization Registry Information Specification	C70 - Immunization Query and Response	C80 Clinical Document and Message Terminology	Health Level Seven (HL7) Version 2.3.1 Centers for Disease Control and Prevention Implementation Guide for Immunizations Data Transaction using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol. Implementation Guide Version 2.2 June 2006
	C88 - Anonymize Immunizations and Response Management Data	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymisation, Unpublished Technical Specification # 25237
	SC110 - Patient Identification Management	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) Version 2.3.1 Chapter 2 Control, Chapter 3 Patient Administration
			Health Level Seven (HL7) Version 2.5, Chapter 2 Control, Chapter 3 Patient Administration, Chapter 5 - Query Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Patient Identifier Cross-Referencing Integration Profile (PIX) Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008 - 2009, Pediatric Demographics, Draft for Trial Implementation (August 22, 2008)
		T23 - Patient Demographics Query	Health Level Seven (HL7) Version 2.5, Chapter 2 Control, Chapter 3 Patient Administration, Chapter 5 - Query Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Patient Demographics Query (PDQ) Integration Profile Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008 - 2009, Pediatric Demographics, Draft for Trial Implementation (August 22, 2008)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement 2008 - 2009, Pediatric Demographics, Draft for Trial Implementation (August 22, 2008)
		T24 - Pseudonymize	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 International Organization for Standardization (ISO) Health Informatics -- Pseudonymization, Unpublished Technical Specification # 25237
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
	SC109 - Security Audit		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
		T17 - Secured Communication Channel	Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
CAP133 - Communicate Immunization Summary Specification	C26 - Nonrepudiation of Origin	TP13 Manage Sharing of Documents	American Society for Testing and Materials (ASTM) Standard Guide for Electronic Authentication of Health Care Information: # E1762-95(2003)
		T31 Document Reliable Interchange	European Telecommunications Standards Institute (ETSI) Technical Specification TS 101 903: XML Advanced Electronic Signatures (XadES)
		T33 Transfer of Documents on Media	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement Volume 3 – Document Digital Signature (DSG) Content Profile
	C78 - Immunization Document	C83 - CDA Content Modules	Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2
			Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0
	C88 - Anonymize Immunizations and Response Management Data	None	International Organization for Standardization (ISO) Health Informatics -- Pseudonymisation, Unpublished Technical Specification # 25237
	TP13 - Manage Sharing of Documents		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
	SC112 - Healthcare Document Management		International Organization for Standardization (ISO) Health informatics - 9660 Level 1 USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile



# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
<b>Case Reporting and Bio-surveillance</b>			
CAP135 - Retrieve and Populate Form Specification	C105 - Patient Level Quality Data Document Using HL7 Quality Reporting Document Architecture (QRDA)	C83 CDA Content Modules C80 Clinical Document and Message Terminology	American Medical Association (AMA) Current Procedural Terminology (CPT®) Fourth Edition (CPT-4); CPT Evaluation and Management Codes Centers for Medicare and Medicaid Services (CMS) National Provider Identifier (NPI) Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987 Federal Medication Terminologies Health Level Seven (HL7) Version 2.5 Health Level Seven (HL7) Version 3.0 Implementation Guide for CDA Release 2 Quality Reporting Document Architecture (QRDA) Based on HL7 CDA Release 2.0 CDAR2_QRDA_R1D1_2009MAR International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM) International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) Logical Observation Identifiers Names and Codes (LOINC®) National Library of Medicine (NLM) Unified Medical Language System (UMLS) RxNorm National Uniform Billing Committee (NUBC) Uniform Bill Version 2007 (UB-04) Current UB Data Specification Manual Field 22, Patient Discharge Status, Codes Unified Code for Units of Measure (UCUM)
	C26 - Nonrepudiation of Origin	TP13 Manage Sharing of Documents	American Society for Testing and Materials (ASTM) Standard Guide for Electronic Authentication of Health Care Information: # E1762-95(2003)
		T31 Document Reliable Interchange	European Telecommunications Standards Institute (ETSI) Technical Specification TS 101 903: XML Advanced Electronic Signatures (XadES)
		T33 Transfer of Documents on Media	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Supplement Volume 3 – Document Digital Signature (DSG) Content Profile
	C76 - Case Report Pre-Populate	C80 Clinical Document and Message Terminology	Health Level Seven (HL7) Version 2.5.1
		C83 CDA Content Modules	Health Level Seven (HL7) Version 3.0
		C35 Lab Result Terminology	Integrating the Healthcare Enterprise (IHE) Quality, Research and Public Health (QRPH) Technical Framework Supplement 2008 – 2009, Drug Safety Content (DSC) Profile, Public Comment, Version 10
	SC108 - Access Control	T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		TP20 - Access Control	Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
		TP30 - Manage Consent Directives	Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	SC109 - Security Audit	T15 Collect and Communicate Security Audit Trail	Health Level Seven (HL7) Version 3.0 Infrastructure Management - Query Infrastructure, Release 2 DSTU Ballot 1 - September 2008
		T16 Consistent Time	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
	TP50 - Retrieve Form for Data Capture	None	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement, Retrieve Form for Data Capture (RFD), Draft for Trial Implementation, October 10 2008
	C82 - Emergency Common Alerting Protocol	None	Organization for the Advancement of Structured Information Standards (OASIS) Common Alerting Protocol (CAP) V1.1, October 2005

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP136 - Communicate Emergency Alert Specification	SC116 - Emergency Message Distribution Element	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
		SC109 - Security Audit Collaboration	Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
CAP137 - Communicate Encounter Information Message	C39 - Encounter Message	None	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Organization for the Advancement of Structured Information Standards (OASIS) Emergency Data Exchange Language (EDXL) Distribution Element (DE) Version 1.0
			International Organization for Standardization (ISO) Health Informatics -- Pseudonymisation, Unpublished Technical Specification number 25237
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication #5-2, May, 1987
			Health Level Seven (HL7) Version 2.5
			International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS)
			International Classification of Diseases, 10th Revision, Related Health Problems (ICD-10-CM)
CAP137 - Communicate Encounter Information Message	C41 - Radiology Result Message	None	International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM)
			International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)
			Logical Observation Identifiers Names and Codes (LOINC®)
			National Uniform Billing Committee (NUBC) Uniform Bill Version 1992 (UB-92) Current UB Data Specification Manual Field 22, Patient Discharge Status, Codes
			Unified Code for Units of Measure (UCUM)
			American Medical Association (AMA) Current Procedural Terminology (CPT®) Fourth Edition (CPT-4)
			Federal Information Processing Standards (FIPS) Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987
			Health Level Seven (HL7) Version 2.5
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 3.0
			International Classification of Diseases, 9th Revision, Clinical Modifications (ICD-9-CM)
			International Health Terminology Standards Development Organisation (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®)

# **HITSP Traceability Matrix** **EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
Information Message Specification	SC115 - HL7 Messaging	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
		SC109 - Security Audit Collaboration	Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		SC109 - Security Audit	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
T17 - Secured Communication Channel	Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992		
CAP138 - Retrieve Pseudonym Specification	T24 - Pseudonymize	None	Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
Emergency			
CAP139 - Communicate Resource Utilization Specification	C47 - Resource Utilization Message	None	Health Level Seven (HL7) Version 2.54
	SC116 - Emergency Message Distribution Element	SC108 - Access Control	Organization for the Advancement of Structured Information Standards (OASIS) Emergency Data Exchange Language (EDXL) Hospital Availability Exchange (HAVE) Version 1.0
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
		SC109 - Security Audit Collaboration	Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
		T63 - Emergency Message Distribution Element	Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication

# HITSP Traceability Matrix EHR-Centric Interoperability Specification

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
<b>Administrative and Financial</b>			
CAP140 - Communicate Benefits and Eligibility	SC114 - Administrative Transport to Health Plan	SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007 Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992 Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T85 - Administrative Transport to Health Plan	Council for Affordable Quality Healthcare (CAQH) CORE 270 Connectivity Rule
			Council for Affordable Quality Healthcare (CAQH) CORE 153 Connectivity Rule
	T40 - Patient Health Plan Eligibility Verification	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1 Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 Council for Affordable Quality Health Care (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase I Operating Rules Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #258 Normalizing Last Name Rule v2.0.0 Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #259 AAA Error Code Reporting Rule v2.0.0 Council for Affordable Quality Healthcare (CAQH) Committee on Operating Rules for Information Exchange (CORE) Phase II #260 Eligibility Data Content Rule v2.0.0 Council for Affordable Quality Healthcare (CAQH) CORE 153 Connectivity Rule
			Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1 Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 National Council for Prescription Drug Programs (NCPDP) Formulary and Benefits Standard Implementation Guide National Council for Prescription Drug Programs (NCPDP) Telecommunication Standard Implementation Guide Version 5.1
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
	TP46 - Medication Formulary and Benefits Information	None	Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X92A1 Accredited Standards Committee (ASC) X12 270 and 271 Transaction Standards Version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X92 Accredited Standards Committee (ASC) X12 270 Transaction Version Standards Release 004010 Accredited Standards Committee (ASC) X12 271 Transaction Version Standards Release 004010 National Council for Prescription Drug Programs (NCPDP) Formulary and Benefits Standard Implementation Guide National Council for Prescription Drug Programs (NCPDP) Telecommunication Standard Implementation Guide Version 5.1
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
	SC108 - Access Control	None	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008 Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0 OASIS Standard; ITU-T X.1141 Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP141 - Communicate Referral Authorization	SC114 - Administrative Transport to Health Plan	SC109 - Security Audit Collaboration	Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
	T85 - Administrative Transport to Health Plan		Council for Affordable Quality Healthcare (CAQH) CORE 270 Connectivity Rule
			Council for Affordable Quality Healthcare (CAQH) CORE 153 Connectivity Rule
CAP142 - Retrieve Communications Recipient Specification	T68 - Patient Health Plan Authorization Request and Response	None	Accredited Standards Committee (ASC) X12 278 Transaction Version Standards Release 004010
			Accredited Standards Committee (ASC) X12 278 transactions standard version 4010, using the Insurance Subcommittee (X12N) Addenda 004010X94A1
			Accredited Standards Committee (ASC) X12 278 transactions standard version 4010, using the Insurance Subcommittee (X12N) Implementation Guides Version Reference Numbers 004010X94
CAP142 - Retrieve Communications Recipient Specification	T64 - Identify Communication Recipients	None	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile
	TP30 - Manage Consent Directives	TP13-Manage Sharing of Documents	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31-Documents Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33-Transfer of Documents on Media	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T17-Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 XCA Supplement
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T16-Consistent Time	Health Level Seven (HL7) Version 3.0 Privacy Consent related specifications
		T15-Collect and Communicate Security Audit Trail	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0, Basic Patient Privacy Consents (BPPC) Profile
		C19-Entity Identity Assertion	
		TP20-Access Control	
	TP13 - Manage Sharing of Documents		Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0, Section 10 Cross-Enterprise Document Sharing (XDS.a)
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 - Registry Stored Query Transaction for XDS Profile Supplement [ITI-18]
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 XCA Supplement
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Volume 2 Supplement 2007 – 2008 Cross-Enterprise Document Sharing-B (XDS.b)

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
CAP143 - Manage Consumer Preference and Consents Specification	SC112 - Healthcare Document Management		OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T31 - Document Reliable Interchange	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) 2007-2008 Trial Implementation Supplement Cross-enterprise Document Reliable Interchange (XDR) Release 3 OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
		T33 - Transfer Documents on Media	Digital Imaging and Communications in Medicine (DICOM) Part 3.12: Media Formats and Physical Media for Media Interchange
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 5.0 or later, Cross-Enterprise Document Media Interchange (XDM) Integration Profile
			OASIS ebXML Registry Information Model (RIM) and Registry Services Specification (RS), version 3.0
			International Organization for Standardization (ISO) Health informatics - 9660 Level 1
			USB Removable Device Type 2.0 (USB Implementers Forum)
		T29 - Notification of Document Availability	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (TF) Supplement 2007 – 2008, Notification of Document Availability Integration Profile, Draft for Trial Implementation, October 10, 2008
		SC108 - Access Control	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Health Level Seven (HL7) V3 RBAC, R1-2008, HL7 Version 3 Standard: Role Based Access Control (RBAC) Healthcare Permissions Catalog, Release 1, February 2008
			Organization for the Advancement of Structured Information Standards (OASIS) Security Assertion Markup Language (SAML) Core v2.0
			OASIS Standard; ITU-T X.1141
			Organization for the Advancement of Structured Information Standards (OASIS) WS-Trust Version 1.3, March 2007
			Organization for the Advancement of Structured Information Standards (OASIS) eXtensible Access Control Markup Language (XACML), ITU-T Recommendation X.1142, February 2005

**HITSP Traceability Matrix**  
**EHR-Centric Interoperability Specification**

HITSP Capabilities	HITSP Constructs	Dependencies	Standards <i>Only includes Selected Standards</i>
		SC109 - Security Audit Collaboration	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
			Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Consistent Time (CT) Integration Profile
			Internet Engineering Task Force (IETF) Network Time Protocol (Version 3) Specification, Implementation and Analysis, "Request for Comment" (RFC) #1305, March, 1992
			Internet Engineering Task Force (IETF) Simple Network Time Protocol (SNTP) Version 4, "Request for Comment" (RFC) #2030, October, 1996
		SC110 - Patient Identification Management	
		T17 - Secured Communication Channel	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework (ITI-TF) Revision 4.0 or later, Audit Trail and Node Authentication (ATNA) Integration Profile, Section 9.1 Authentication
		T64 - Identify Communications Recipients	Integrating the Healthcare Enterprise (IHE) IT Infrastructure Technical Framework, Revision 4.0 or later, Personnel White Pages profile